



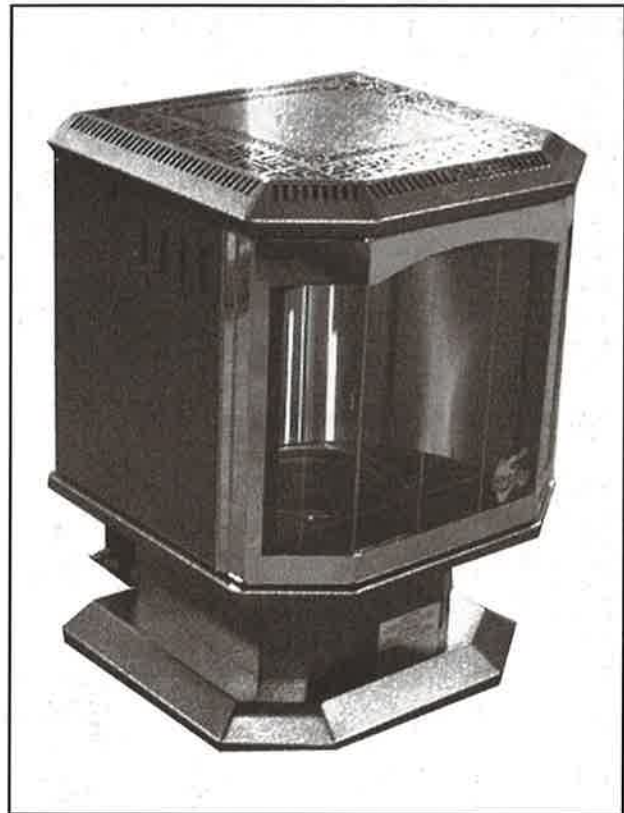
## INSTALLATION AND OPERATING INSTRUCTION MANUAL

### OIL BURNING STOVE MODEL DRAGON AND DRAGON BABY

CERTIFIED BY WARNOCK HERSEY IN ACCORDANCE WITH  
STANDARD CSA B 140.3 AND UL-896

#### WARNING

OIL BURNING APPLIANCES MUST  
BE CONNECTED TO A CHIMNEY  
WHICH WILL PROVIDE ADEQUATE  
DRAUGHT TO ENSURE A PROPER  
AND SAFE OPERATION OF THE  
BURNER.



#### PSG DISTRIBUTION INC.

798, 8th street, La Guadeloupe  
Beauce (Québec) CANADA G0M 1G0

Tel.: (418) 459-6458 Fax.: (418) 459-6450

Warnock Hersey



***KEEP THIS MANUAL FOR FUTURE REFERENCE***

**PSG DISTRIBUTION INC.  
5 YEARS LIMITED WARRANTY**

**PSG Distribution** warrants to the original consumer purchaser that the oil appliances operating with gravity force, will be free from defects in materials and workmanship, under normal use and service, for a period of 5-years from the date of purchase.

These warranties shall be void and have no effect if the appliance is not properly installed in accordance with the installation instructions manual provided with the product.

**WARRANTY LIMITATIONS:**

During the first year of the limited warranty, **PSG Distribution** will provide replacement parts at no charge. All repairs must be approved by an authorized company official before any work is done.

During the second through the fifth year of the limited warranty, **PSG Distribution** will provide replacement parts at no charge, except for the parts listed below. The following parts are only guaranteed for the first year of the warranty : BURNER, RINGS, OIL VALVE, GLASS PANELS, LOGS(optional) AND THE BLOWER ASSEMBLY(optional).

This warranty may not be extended by our representatives in any manner whatsoever.

The remedy for damages as the result of any defects in the product which have been warranted herein is limited to replacement of parts and does not include any incidental or consequential damages or expenses sustained in connection with the product including damages to property.

The maker is not bound by this warranty if the purchaser does not return the part of the warranty attached at the bottom in 10 days from the date of purchase.

**WARNING:**

If an oil stove with another appliance capable of evacuating air inside the house outside are working at the same time, it could provoke a negative pressure in the house. Smoke and a sent of oil will be released while the oil stove is functioning. To avoid this situation, you can install a permanent access of exterior air in the same room as the stove. Or you could temporarily open the nearest window next to the stove. This only has to be done when the stove and another appliance such as the dryer or/and a kitchen stove hood or/and air exchanger is functioning at the same time.

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## TECHNICAL CHARACTERISTICS

### CLEARANCE TO COMBUSTIBLES :

	<b><u>DRAGON</u></b>	<b><u>DRAGON BABY</u></b>
Back :	6" (152mm)	8" (203 mm)
Left side :	10" (254 mm)	8" (203 mm)
Righ side :	24" (308 mm)	24" (608 mm)
Corner :	6" (152 mm)	6" (152 mm)

A MINIMUM CLEARANCE OF 9" FROM PIPE TO COMBUSTIBLES MUST BE ALLOWED.

### SPECIFICATIONS :

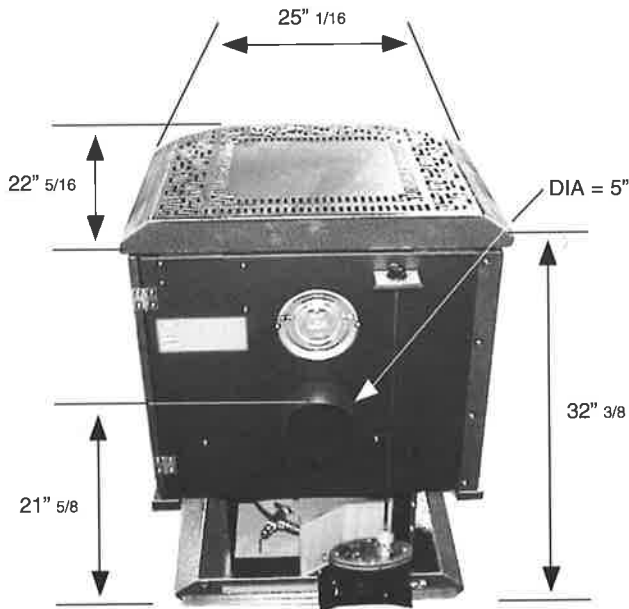
#### **DRAGON**

Type of fuel :	Oil #1	Oil #2
Heat output :	45 637 BTUH	43 125 BTUH
Recommended draugh :	0.05" w.c.	0.05" w.c.
Efficiency :	75.5%	75.0%

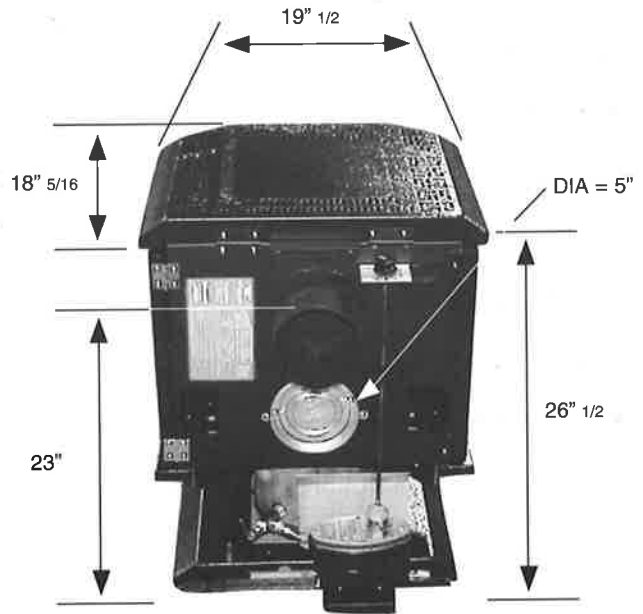
#### **DRAGON BABY**

Heat output :	24 600 BTUH	18 600 BTUH
Recommended draugh :	0.05" w.c.	0.05" w.c.
Efficiency :	71.5%	70.0%

## DIMENSIONS



**DRAGON**



**DRAGON BABY**

## CHIMNEY AND CONNECTION

It is permitted to install on the appliance a factory-built chimney type L or better.

If your existing chimney is located outside the house, then it is recommended to install a 5" liner inside this one or insulate the outside of the chimney.

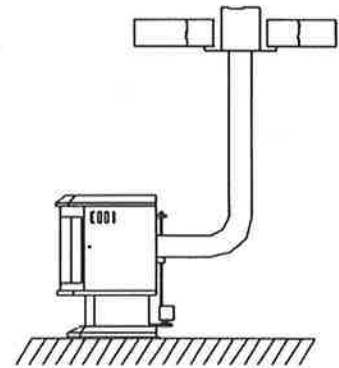
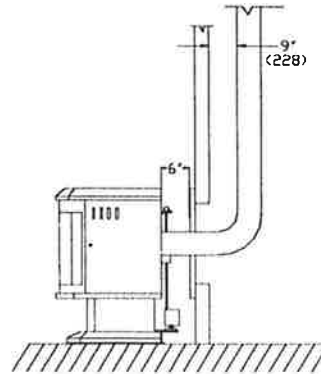
## WARNING

This stove is made to installed on a 5" diameter chimney. It is possible that the stove will not properly work if installed on a chimney with a larger diameter than 5". In that case, a 5" liner can be inserted in the chimney and connected to the stove. This type of installation must be verified by a professional chimney contractor. This verification is to obtain the maximum satisfaction from the stove while it is being used.

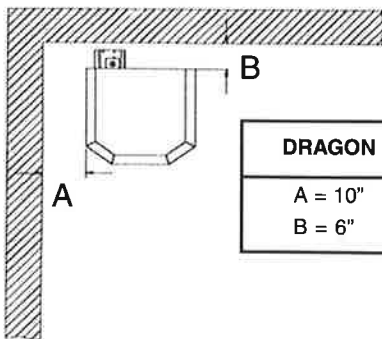
- Before the installation is carried out, ensure that the chimney is in good condition and will provide adequate draught, i.e. 0.05" W.C.
- The chimney should be well insulated.
- It must be airtight and its diameter must be constant.
- The minimum diameter must be no less than 5".
- The height of the flue should be no less than 5 meters (16 1/2 feet) and the top should be above the ridge of the roof and terminate with out any form of restriction in the open air.
- Never use a smaller diameter than that intended for the appliance or restrict it in any way. (minimum 5")
- The connection between the stove's pipe and the chimney must be perfectly airtight.

**NOTE :** It is essential to check that the room in which the appliance is installed is sufficiently well ventilated to provide an adequate air supply

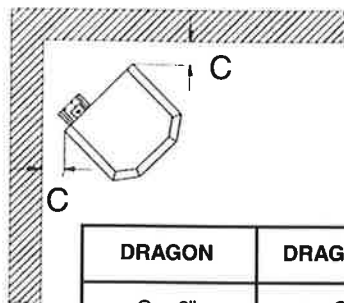
THE INSTALLATION SHALL BE IN ACCORDANCE WITH THE REGULATIONS OF AUTHORITIES HAVING JURISDICTION AND THE INSTALLATION CODE FOR OIL BURNING EQUIPMENT CSA-B-139.



## LOCATING THE APPLIANCE



DRAGON	DRAGON BABY
A = 10"	A = 8"
B = 6"	B = 8"



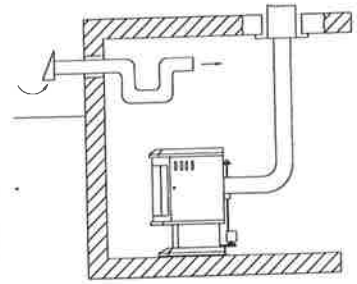
DRAGON	DRAGON BABY
C = 6"	C = 6"

**NOTE:** Do not install the appliance on carpet.

- The flue outlet is fitted on the back of the appliance.
- It is possible to connect the stove directly to the chimney using a short horizontal length of pipe or make a vertical connection to the back of the stove using the 90° tee. (see figure above).
- **MAKE SURE THAT THE BURNER ALWAYS STAND PERFECTLY LEVEL WITH THE FLOOR.** The appliance must be correctly fixed to the floor using the two fixing screws to be fitted at the rear of the frame (see drawing p.8).
- A minimum clearance of 229 mm (9") from pipe to combustible must be allowed.

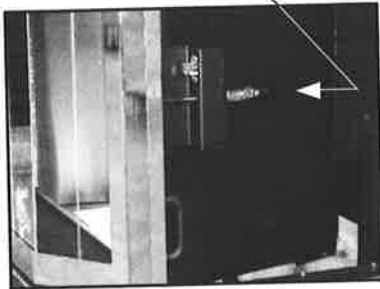
THE BURNING OF ONE LITRE FUEL OIL REQUIRES APPROXIMATELY 30 m<sup>3</sup> OF AIR AND WILL PRODUCE APPROXIMATELY 0,8 Kg OF WATER VAPOUR AND 9m<sup>3</sup> OF CARBON DIOXIDE + ATMOSPHERIC NITROGEN. **A SOURCE OF AIR FROM THE OUTSIDE IS NEEDED TO REPLACE THE COMBUSTION AIR.**

**DO NOT USE GASOLINE, CRANKCASE OIL OR ANY OIL DERIVATIVE.**



## LIGHTING / ADJUSTMENT

PUSH AND TURN 1/4 OF A TURN TO OPEN



**DRAGON**



**DRAGON BABY**

- Open the front door and make sure that the 2 burner's rings are in the right position (see drawing p.8).
- Open tap on the pipe between the stove and your oil tank.
- Arm valve's lever at the back of the stove by pushing it downward (see figure p.7).
- Set the flow regulating handle to position "6" and turn it down to "1" as soon as the oil has started flowing into the burner.
- Pour in the pot 1 oz of wood alcohol (methyl hydrate). The quantity of wood alcohol can be replaced by 1/2 oz of gel. **IT IS VERY IMPORTANT THAT THE QUANTITY BE RESPECTED.**
- Provoke the alcohol or the gel with the help of a lit up match by throwing it in the pot.
- Close the door of the stove.
- After 15 minutes, the burner will have warmed up and you can start increasing the flow step by step (one position at a time until you have reached the position desired).
- Always wait 15 minutes minimum before increasing the flow (between each position). No waiting is needed to decrease the flow.

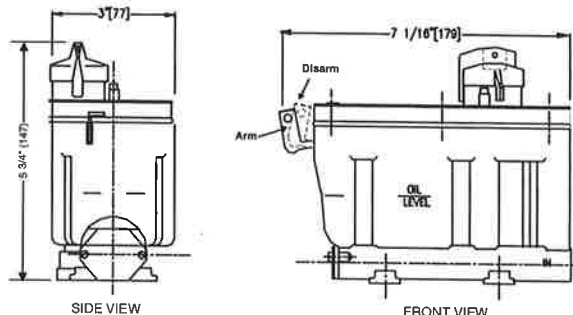
### IMPORTANT NOTE:

IF YOU MISS THE STOVE'S LIGHTING, ALWAYS WAIT FOR THE BURNER TO COOL DOWN TO ROOM TEMPERATURE BEFORE USING BURNING ALCOHOL AGAIN OR ELSE. USE COMMERCIAL LIGHTING MATERIAL (SOLID) OR A PIECE OF COTTON DAMPED IN OIL. IF, FURTHER TO SOME MISOPERATION, THE BURNER FINDS ITSELF FILLED WITH IMPORTANT QUANTITIES OF OIL, ALL OF THE OIL MUST FIRST BE REMOVED (E.G. BY USING A SPONGE) BEFORE LIGHTING THE STOVE AGAIN.

**DO NOT ATTEMPT TO START THE BURNER WHEN EXCESS OIL HAS ACCUMULATED, OR WHEN THE BURNER IS HOT. DUE TO HIGH SURFACE TEMPERATURES KEEP CHILDREN, CLOTHING AND FURNITURE AWAY.**

## CLEANING

While cleaning the glasses on your oil stove with detergent, make sure to rinse off your glasses thoroughly: because residues might be left on the glasses. If it is not properly rinsed off the remaining chemicals from the detergent will stain your glasses when the stove will be heated. The stains will be very difficult to remove. In order to avoid this situation; we recommend that you only use a damp cloth to clean your glasses and do it once a week. As long as the chimney's draught is correct and the valve is correctly set, the burner should not get dirty. The cleaning tee should be turned, pushed forward and pulled back into place once a week. The burner and its rings should be cleaned with a metallic brush at two months intervals. (The large front door makes these operations very easy to perform. When lighting the stove at the beginning of the heating season, clean the valve's filter, check cleanliness of the stove's internal flue parts and for the stove's rear smoke manifold. Both sweep and inspect your chimney at least once a year. Clean the stove and check the door seals. Inspect the internal flue paths. (remove the cleaning trap door) at least once per heating season.



## TURNING THE STOVE OFF

Set the flow regulating handle to position "0". If you plan to keep the stove off for a long while, it is recommended to disarm the valve's lever and close the tap on the pipe between the stove and your oil tank. (See front view above) **ALWAYS KEEP THE VALVE SHUT OFF WHEN THE BURNER IS NOT OPERATING.**

## DRAUGHT

Chimney's draught is of capital importance to ensure a good combustion. When the stove is set to maximum output (position "6"), the draught must reach 0.05" W.C. at least, after having burned for an hour. If such was not the case, the stove's efficiency would be reduced.

**NOTE:** In case the chimney's draught is higher than 0.05" W.C., the stove's draught limiter must be used. The draught can be properly measured only by using a draught-meter. Any other method or instrument (candle flame, etc.) shall be totally unable to give any accurate measurement. Providing the chimney's draught is correct, you should be perfectly satisfied with your stove combustion.

**IMPORTANT :** It is important to check that the draught limiter is in the right position.

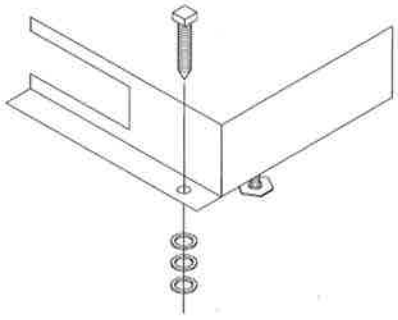


**DRAGON**



**DRAGON BABY**

**NOTES:** Remove the strap to take the content of the burner. **Replace the two screws.**



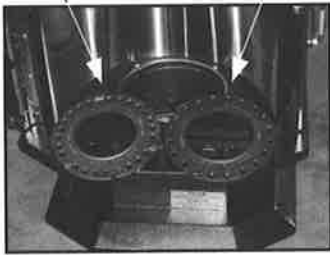
### LOCATING THE APPLIANCE

See page 5 for details.

## INSTALLATION OF THE BURNER RINGS

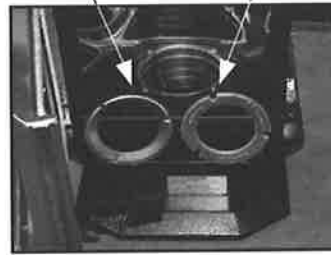
1. Install the lower ring first, making sure the cavities are aligned to allow the ring to fit on the lower retaining rods.
2. Install the upper ring on the upper retaining rods.

LOWER RING                  UPPER RING



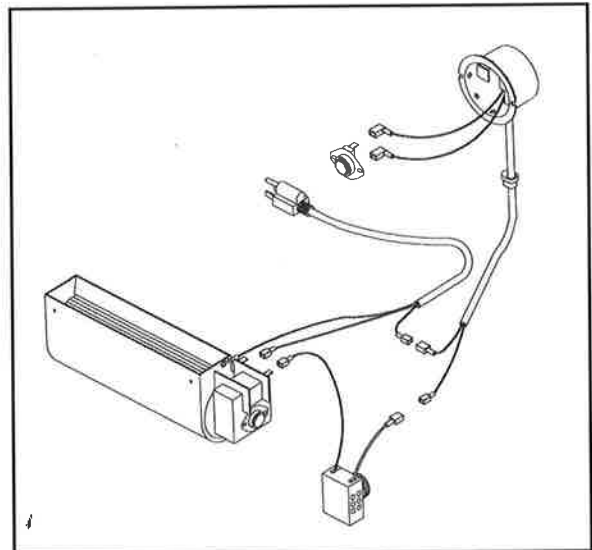
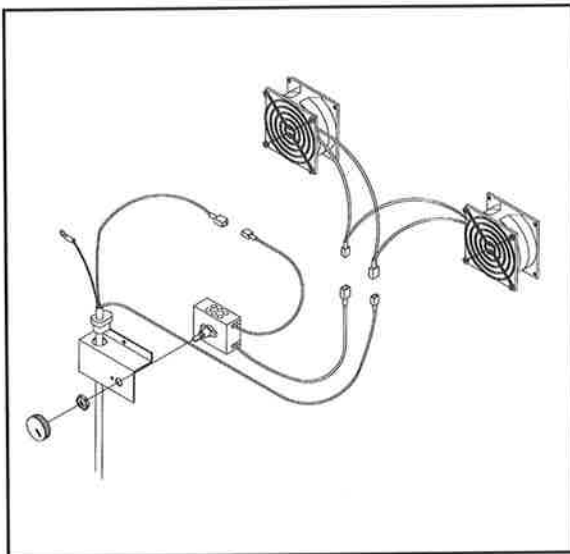
**DRAGON**

UPPER RING                  LOWER RING



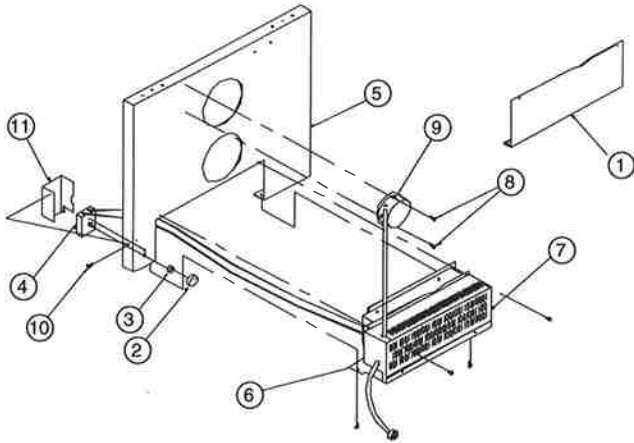
**DRAGON BABY**

## BLOWER WIRING DIAGRAM



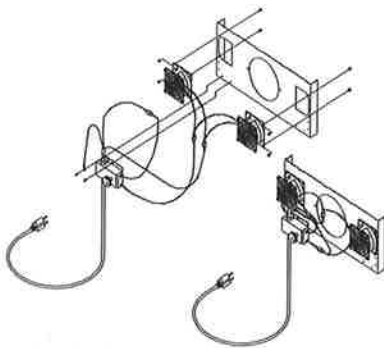


## DRAGON BLOWER OPTION INSTALLATION



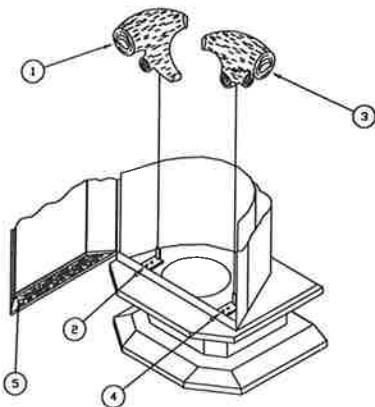
- A. Remove the plate #1 and keep the 4 screws.
- B. Remove the plastic knob #2 and the nut #3 situated on the shaft of the speed control #4.
- C. Put the speed control #4 inside the appliance and screw the bottom plate #6 and the top plate #7 on the panel #5.
- D. Remove the 2 screws #8 and install the thermosupport #9.
- E. Place the speed control #4 into the 2 holes of the panel #5 and screw the nut #3 on the shaft of the speed control.
- F. Put the plastic knob #2 at the end of the shaft of the speed control #4
- G. Remove the screw #10 on the deflector #11 and put the deflector on the speed control.
- H. Screw the deflector #11 on the panel #5 with the screw #10.

## DRAGON LOGS OPTION INSTALLATION



- A. Fix the 2 blowers on the rear panel with 4 screws and 4 nuts.
- B. Fix the rheostat bracket on the rear panel with 2 screws. Note: Insert the red terminal (ground) between the rheostat bracket and one of the two screws.
- C. Tie together all the wires with a t-rap.

## DRAGON LOGS OPTION INSTALLATION



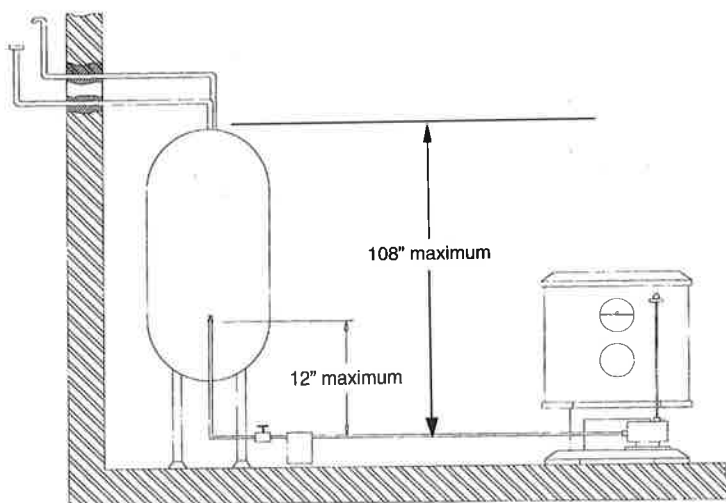
- A. Insert the log #1 so it fits on the support #2.
- B. Insert the log #3 so it fits on the support #4.
- C. Arrange the embers #5 on the inner part of the bay window.

## DRAGON BABY BLOWER OPTION INSTALLATION



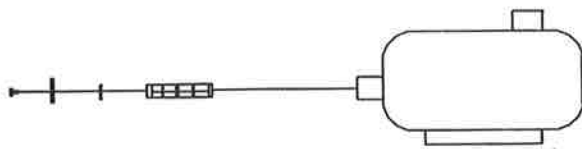
Insert the log in the combustion chamber and put it on the bottom panel.

## INSTALLATION OF THE OIL TANK



The oil outlet on the oil tank must be at least 12 inches higher than the oil inlet on the stove regulator. And the top of the oil tank must not be higher than 108 inches than the oil inlet on the stove regulator.

## CLEANING OF THE OIL FILTER



1. Remove the plate (#1)
2. Remove the gasket (#2)
3. Remove the oil filter (#3)
4. To clean the oil filter, rinse in petroleum or kerosene.
5. Dry the oil filter and put it back in place.

## TROUBLE SHOOTING

- **ON POSITION 6, THE FLAME GETS LONGER, PRODUCES SMOKE AND BLACK DEPOSITS ON THE WINDOW.**

**1st explanation:**

- Position "6" was resched too quickly.
- Set flow regulation handle to position 0 and wait for combustion to get back to normal. Then progressively get back to position desired.

**2nd explanation:**

- Maximum flow is too high. Set flow regulation handle to an intermediate position and ask your dealer to regulate your stove's valve.

- **ON POSITION 1 OR 2, THE FLAME PRODUCES SMOKE:**

Explanation: Minimum flow is too low.

- Set flow regulating handle to a higher position and call your dealer.

- **THE FLAME PRODUCES SMOKE IN ANY POSITION;**

**1st explanation:**

- The door is not completely close.

**2nd explanation:**

- The burner's holes are blocked, clean the burner.

**3rd explanation:**

- Chimney's draught is too low. Call your dealer.

- **THE FLAME GOES OUT:**

**1st explanation:**

- Oil tank is empty. Refil tank.

**2nd explanation:**

- Impurities coming from oil, tank or pipes block the flow;
  - a) inside the tank
  - b) in the valve's filter
  - c) in the slot of the valve's flow regulation rod
  - d) at cleaning tee tip

Call your dealer to have your stove inspected and cleaned.

**IMPORTANT REMINDER:**

The chimney's draught ensures the supply of air combustion to take place in the burner. Dirty windows are caused by bad combustion, itself being due to lack of air. Most of the time, this is due to insufficient chimney draught.

## REGULATION OF THE VALVE

### TO BE CONDUCTED BY A PROFESSIONAL

**NOTE:** No regulation should be needed on the valve unless the fuel's viscosity varies. On top of the valve, two regulation screws can be found: "Maximum flow decrease" and "Minimum flow decrease". Oil flows cannot be increased.

- a) If the minimum flows is too high, turn the relevant screw in the direction the arrow points to.
  - b) If the maximum flow is too high, turn the relevant screw in the direction the arrow points to.
- Regulating a valve's flow requires lots of precision and sensitivity. It is advisable to act upon the regulation screw with utmost care. Always start by setting minimum flow.

*The oil tank shall be located so that the tank will not be exposed to the direct rays of the sun, or be adjacent to any source of intense heat.*



## SPARE PARTS

After years of use, if you need to replace some parts, please contact your supplier. Give him product data as displayed in your warranty voucher, or on your appliance's name plate at the rear. Keep the warranty voucher even after its validity date.

Our dealers are in possession of all spare parts nomenclatures and technical data about our products, and will provide you with the spare parts you need and any maintenance intervention within the scope of their professional competence.

**NOTE:** See annexe

# ANNEXE

# NOTES